

P221 1-6, 13, 17, 21-26, 35-37

1. C 2. E 3. F 4. A 5. B 6. D

13.  $A(1,9)$   $AB = \sqrt{(4-1)^2 + (8-9)^2} = \sqrt{10}$   
 $B(4,8)$   
 $C(2,5)$

$BC = \sqrt{(4-2)^2 + (8-5)^2} = \sqrt{13}$

$AC = \sqrt{(2-1)^2 + (5-9)^2} = \sqrt{17}$

Scalene, Not Right

Check to see if Right using slopes of 2 smaller sides  
 Is  $\overline{AB} \perp \overline{BC}$ ?

$\overline{AB} \ m = -\frac{1}{3}$   $\overline{BC} \ m = \frac{3}{2}$  No

17.  $2x - 2 = x + 45$

$x = 47$

$2(47) - 2 = 92$

21. 50  $\begin{pmatrix} 90 \\ -48 \end{pmatrix}$

22. 130  $\begin{pmatrix} 180 \\ -50 \end{pmatrix}$

23. 50  $\begin{pmatrix} 180 \\ -130 \end{pmatrix}$

24. 130  $\begin{pmatrix} 90 \\ -50 \end{pmatrix}$

25. 40  $\begin{pmatrix} 180 \\ -20 \end{pmatrix}$

26. 30  $\begin{pmatrix} 180 \\ -130 \end{pmatrix}$

35.  $x = 26$   $\begin{pmatrix} 90 \\ -64 \end{pmatrix}$   
 $y = 64$   $\begin{pmatrix} 90 \\ -26 \end{pmatrix}$  Alt Int

36.  $x + y = 90$   
 $x = 47 + 15$  ext 2  
 $x = 62$   
 $y = 28$

37.  $x + y + 18 = 90$   
 $y + 35 + 18 = 90$   
 $y = 37$   
 $x = 35$